CLAIMS:

1. A central processing unit comprising:

means for processing computer instructions comprising means for receiving computer instructions and means for executing computer instructions;

a secure memory unit coupled to said processing means, said secure memory unit having one or more resident security check programs therein;

wherein when said means for processing information receives a secure attention instruction through said receiving means said means for executing computer instructions interrupts the instructions it is executing, and executes the security check program by retrieving its instructions from the secure memory.

2. The central processing unit of claim 1 wherein said means for receiving computer instructions is a system bus.

3. The central processing unit of claim 1 wherein said means for executing computer instructions is at least one processor.

4. The central processing unit of claim 1 wherein access to said secure memory unit coupled to said processing means is restricted to the processing means in the absence of a cryptographically validated administrative secure attention instruction.

5. The central processing unit of claim 1 wherein said security check programs

comprises a cryptographic check key, and upon the execution of the security check program if the result of the check program is satisfactory, the cryptographic check key is used to authenticate the result values transmitted to the source of the secure attention instruction.

6. The central processing unit of claim 4 wherein said security check programs comprises a cryptographic check key, and upon the execution of the security check program if the result of the check program is satisfactory, the cryptographic check key is used to authenticate the result values transmitted to the source of the secure attention instruction.

7. The central processing unit of claim 4 wherein the secure attention instruction is issued by an external source and received by the CPU through a first program.

8. The central processing unit of claim 7 wherein the secure attention instruction is issued by a mobile software agent that executes on a secure computer system.

9. The central processing unit of claim 6 wherein the secure attention instruction is issued by an external source and received by the CPU through the first program.

10. The central processing unit of claim 9 wherein the secure attention instruction is issued by a mobile software agent that executes on a secure computer system.

11. A secure computer system comprising:

a central processing unit (CPU) for executing conventional instructions and secure attention instructions;

a secure memory unit coupled to the CPU, the secure memory unit containing one or more check programs therein, the memory unit is configured to limit access to the check programs to only the CPU in the absence of a cryptographic key;

a computer readable medium coupled to the CPU through a first program,

a second program contained on the computer readable medium accessed by the CPU through said first program;

wherein upon the receipt of a secure attention instruction by the CPU, the CPU interrupts the execution of all other instructions, and executes one or more check programs from the secure memory unit; upon completion of the check programs, the CPU returns results of the check programs authenticated with a cryptographic value.

12. The secure computer system of claim 11 wherein the first program is the operating system alternatively the secure memory unit is accessible via an external connection that bypasses the CPU and all other parts of the secure computer system for the purposes of managing the check programs.

13. The secure computer system of claim 12 wherein the secure attention instruction is issued by an external source and received by the CPU through the first program.

14. The secure computer system of claim 13 wherein the secure attention instruction is issued by a mobile software agent that executes on a secure computer system.

15. The secure computer system of claim 11 wherein the computer readable medium is a memory storage unit.

16. The secure computer system of claim 15 wherein the second program contains executable code.

17. The secure computer system of claim 11 wherein the secure memory unit is accessible via an external connection that bypasses the CPU and all other parts of the secure computer system upon the completion of a cryptographic authentication protocol.

18. A central processing unit comprising:

means for processing computer instructions comprising means for receiving computer instructions and means for executing computer instructions;

a secure memory unit coupled to said processing means, said secure memory unit having one or more resident security check programs therein;

wherein when said means for processing information receives a secure attention instruction through said receiving means said means for executing computer instructions interrupts the instructions it is executing, and executes the security check program by retrieving its instructions from the secure memory;

wherein said security check programs comprise a cryptographic check key, and upon the execution of the security check program if the result of the check program is satisfactory, the cryptographic check key is used to authenticate the result values transmitted to the source of the secure attention instruction.